

claims 17-20 with underlining. Applicants submit that claims 17-20 now conform to 37 C.F.R. § 1.121(e).

The specification was objected to under 35 U.S.C. § 112, first paragraph, for not providing support for the invention as now claimed. Applicants respectfully traverse this rejection.

The original patent is entitled "GLASS SHEET BENDING AND TEMPERING APPARATUS". The ABSTRACT describes such "a glass bending and tempering apparatus" but states as an independent feature of the invention that:

"Quenching gas is supplied by both platens (14, 22) through quench openings (18) that move with the platen (14, 22) to temper the bent glass sheet between the platens."

In the BACKGROUND ART, the specification acknowledges that:

". . . once the glass sheet arrives at the quenching station, the quenching air typically is applied in a non-uniform manner with respect to the bend in the bent glass sheet causing unbalanced rates of cooling over the surface of the glass sheet." (Column 1, lines 52-56).

Applicants respond to this problem in the DISCLOSURE OF INVENTION, by noting with respect to this tempering feature that:

"Another object of the invention is to provide an apparatus that has movable quench openings that move with the surfaces of the flat glass sheet to provide equal thermal conditions during tempering and a more uniformly tempered glass sheet." (Column 2, lines 38-42).

This object is supported throughout the specification which states:

"In carrying out the above objects"
The first platen is deformable and includes an actuator for deforming the

first platen from a planar shape to a bent shape. The first platen includes quench openings throughout. The quench openings of the first platen are movable with the platen during the deformation of the platen. A second platen has quench openings throughout and opposes the first platen with the glass sheet between the platens." (Column 2, lines 53-60).

Subsequently, the specification states:

"After the bending, quenching gas is supplied to the quench openings of both platens and thereby to both sides of the glass sheet to temper the bent glass sheet between the platens." (Column 3, lines 5-8).

* * *

"Both of the platens include quench openings that move therewith during the deformation of the platens and subsequently supply quenching glass to temper the bent glass sheet." (Column 3, lines 24-27).

* * *

"Quench tubes define the quench openings of the lower platen and rotatably support the drive shafts thereof such that the drive wheels move the heated glass sheet during . . . quenching. The upper platen includes idler shafts, idler wheels mounted on the idler shafts to engage the heated glass sheet and to rotate with movement of the glass sheet. Similarly, quench tubes define the quench openings of the upper platen and rotatably support the idler shafts." (Column 3, lines 32-40).

* * *

"The apparatus further includes a source of quenching gas and a connector for connecting the source of quenching gas to the quench tubes. A means reversibly drive the drive wheels to move the glass sheet during the . . . quenching." (Column 3, lines 48-53).

* * *

"The above object and other objects, features and advantages of the present invention are readily apparent from the following detailed description of the best mode for carrying out the invention when taken in connection with the accompanying drawings." (Column 3, lines 64-68).

The specification and BRIEF DESCRIPTION OF THE DRAWINGS refers to certain drawings in support of this stated object of the invention which is:

". . . to provide an apparatus that has movable quench openings that move with the surfaces of the flat glass sheet to provide equal thermal conditions during tempering and a more uniformly tempered glass sheet."

Figures 2, 3 and 5-8 illustrate the structure for providing such "more uniformly tempered glass sheet" in accordance with such object of the invention.

Under BEST MODE FOR CARRYING OUT THE INVENTION, the specification continues to describe what is intended to be covered and secured by the original patent:

"The first (lower) platen includes quench openings 18 throughout a surface 20 of the platen, as seen in Figure 2. The quench openings 18 are movable with the platen 14 during deformation of the platen

A second (upper) platen 22 also has quench openings 18 throughout a surface 20' of the platen, best seen in Figure 3. The second platen 22 opposes the first platen 14 with the glass sheet 12 therebetween. (Column 4, lines 57-65).

* * *

Quenching gas is supplied to the quench openings of both platens 14, 22 and thereby to both sides of glass sheet 12

to temper the bent glass sheet between the platens." (Column 5, lines 10-13).

* * *

"The upper platen 22 is initially conformingly deformable to the shape of the lower platen 14 as the heated glass sheet 12 is moved with the lower platen" (Column 4, lines 28-32).

* * *

"Both of the platens 14, 22 include quench openings 18 that move with the platens during the deformation of the platens and subsequently supply quenching gas to temper the bent glass shape." (Column 5, lines 35-38).

* * *

"Quench tubes 32 define the quench openings 18 of lower platen 14 and rotatably support drive shafts 28 such that the drive wheels 30 move the heated glass sheet 12 during . . . quenching. A control 34 and reversible drive electric motors 36 drive drive wheels 30 to index the glass sheet 12 into the glass . . . tempering apparatus, oscillate the glass sheet during . . . tempering and index the glass sheet out of the apparatus after the . . . quenching"

As shown in Figure 3 of the drawings, the upper platen 22 includes idler shafts 38 and idler wheels 40 mounted on the idler shafts to engage the heated glass sheet 12 and to rotate with movement of the glass sheet. As with the lower platen 14, quench tubes 32 define the quench openings 18 of the upper platen 22 and rotatably support the idler shafts 38." (Column 5, lines 44-60).

* * *

"With further reference to Fig. 1 of the drawings, apparatus 10 includes a source 44 of quenching gas and a connector 46 for connecting the source of quenching gas to the quench tubes 32. Spacer

wheels 48 are mounted to the platens 14, 22 and separate the platens from contact so that the heated glass sheet 12 can be introduced therebetween." (Column 6, lines 7-13).

* * *

"Figs. 5 through 8 illustrate a cycle of operation of apparatus 10. In Fig. 5, platens 14, 22 are in a planar spaced configuration for receiving the heated glass sheet 12 which has been heated in a glass heating furnace, not shown. Actuator 42 has been operated to maintain upper platen 22 in a spaced planar position above lower platen 14. After the heated glass sheet 12 has been indexed onto lower platen 14 by operation of drive wheels 30, beneath upper platen 22, the lower platen 14 is raised and deformed by actuator 16 to a preset profile . . . while oscillating the glass sheet between platens 14, 22...." The glass sheet 12 is then immediately quenched to provide the desired mechanical characteristics.

Figure 7 of the drawings illustrates the post bending position of the glass sheet bending and quenching cycle wherein actuator 42 maintains the upper platen 22 against template 24 while at the same time lower platen 14 is lowered by operation of actuator 16 to thereby allow the bent glass sheet 12 to be indexed out of apparatus 10." (Column 6, lines 18-43).

The original patent includes claims 1-16. But in each of the claims the claimed invention is more narrowly defined than was intended to be secured by the object "to provide an apparatus that has movable quench openings that move with the surface of the glass sheet to provide equal thermal conditions during tempering in a more uniformly tempered glass sheet." (Underlining added).

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The invention disclosed in this reissue application is included in each of claims 1-16 as:

". . . said first platen including quench openings throughout the extent thereof; said quench openings of the first platen movable therewith during the deformation of the platen; a second platen having quench openings throughout the extent thereof and opposing the first platen in spaced relationship with the glass sheet therebetween; . . . and quenching gas being supplied to the quench openings of both platens and thereby to both sides of the glass sheet to temper the bent glass sheet between the platens."

But in addition to limitations defining such quenching or tempering invention, each of claims 1-16 throughout their prosecution, were inadvertently and unnecessarily limited, *inter alia*, to apparatus for "glass bending."

The claims 17-25 now in the application are parsed hereinbelow and related to specific disclosure in the original patent emphasized hereinabove.

17. Apparatus for more uniformly tempering a glass sheet comprising:

opposing upper and lower movable rows of spaced apart quench tubes, each row of quench tubes having quench openings which are conformable to the glass sheet when the rows move;

*Wrong!
which move
with the tubes*

". . . a pair of opposed bending platens" (Column 4, lines 5-6). Spaced apart quench tubes 32 having quench openings 18 are shown in movable rows in Fig. 3 for the upper bending platen. Spaced apart quench tubes 32 having quench openings 18 are shown in movable rows in the Fig. 2 "plan view of a lower bending platen", (column 4, lines 7 and

means for movably engaging the glass sheets connected to said movable rows of quench tubes; and

means to supply quenching gas through the quench openings to uniformly temper a bent glass sheet therebetween.

18. Glass bending and tempering apparatus comprising:

a first deformable platen for receiving a heated glass sheet and including a plurality of first longitudinally extending quench tubes having quench openings that move with the tubes during the deformation of the first platen;

a second deformable platen having a second plurality of longitudinally extending quench tubes having quench openings that move with the second plurality of tubes during deformation of the second platen;

the quench openings of the first deformable platen and the quench openings of the second deformable platen opposing each other when a bent glass sheet is

8). Figs. 5-8 shows the platens 14,22 opposing each other.

As shown in Fig. 2 of the drawings, "... the lower platen 14 includes ... drive wheels 30" (column 5, lines 39-40).

". . . quenching gas (from source 44) is supplied to ... both sides of glass sheet 12 to temper the bent glass sheet" (Column 5, lines 10-13).

". . . a first platen for receiving a heated glass sheet ..." (column 2, line 52). Lower quench tubes 32 having quench openings 18 are shown longitudinally extending in the Fig. 2 "plan view of a lower bending platen (14)", (column 4, line 7).

Upper quench tubes 32 having quench openings 18 are shown longitudinally extending in the Fig. 3 view of the upper platen 22.

"a pair of opposed bending platens (column 4, lines 5-6).

". . . quenching gas (from source 44) is supplied to ...

therebetween; and

means to supply quenching gas through the quench openings to temper such bent glass sheet.

19. Glass bending and tempering apparatus as in claim 18 further comprising:

an actuator connected to one of the plurality of longitudinally extending quench tubes for deforming the platen from a planar shape to a bent shape.

20. Apparatus for tempering glass sheets comprising:

quench means including upper quench tubes arranged in longitudinal rows which are spaced apart across the width of the quench section,

both sides of glass sheet 12 to temper the bent glass sheet" (Column 3, lines 5-7, column 5, lines 10-13).

". . . a source 44 of quenching gas and a connector 46 for connecting the source of quenching gas to the quench tubes 32." (Column 6, lines 8-10).

". . . includes an actuator 16 for deforming the platen from a planar shape to a bent shape." (Column 4, lines 47-49);

". . . an actuator 16 for deforming the (lower) platen from a planar shape to a bent shape", re Figs. 5-8. See also last 4 lines of Abstract; column 2, lines 38-42; column 3, lines 24-27; and column 5, lines 35-38.

Upper quench tubes 32 are shown spaced apart in longitudinal rows across the platen in Fig. 3.

the quench means also including lower quench tubes arranged in longitudinal rows which are spaced apart across the width of the quench section,

each longitudinal row of lower quench tubes being supported on a support that extends lengthwise in the quench section,

quench rollers in the quench section rotatably mounted in longitudinal rows between pairs of lower quench tubes for transporting the glass sheet in the quench section,

power means connected to the quench rollers for rotating them,

means connected to the lower support in the quench section for moving the lower support to change the vertical position of the lower quench tubes and the quench rollers to a quench position

Lower quench tubes 32 are shown spaced apart in longitudinal rows in the Fig. 2 "plan view of a lower bending platen", (column 4, line 7) and "... across the platen 14. . . ." (Column 4, lines 54-56).

"Actuator 16 is illustrated as a cable driven mechanical actuator 16' in Fig. 1, and also as a plurality of fluid actuatable piston and cylinder arrangements 17 in Figs. 5 through 8" (column 4, lines 49-53).

As shown in Fig. 2 of the drawings, "the lower platen 14 includes ... drive wheels 30 ... to provide movement of the glass sheet during platen deformation" (Column 5, lines 39-43). Such wheels 30 are shown in longitudinal rows between pairs of quench tubes in Figs. 2 and 5-8.

"reversible drive electric motors 36 drive drive wheels 30" (Column 5, lines 48-53).

Re Figs. 1 and 5-8, "Actuator 16 is controllable to control the amount of bending or deformation across the platen 14." (Column 4, lines 54-56);

where the lower quench tubes and the quench rollers have the same contour as the bent glass sheet, and

means connected to the upper support in the quench section for moving the upper support to change the vertical position of the upper quench tubes to a quench position where the upper quench tubes have the same contour as the bent glass sheet.

21. An oven for use in a glass bending apparatus comprising:

a heating section;

a bending section adjacent to the heating section;

means in the oven for heating a glass sheet;

the bending section having a plurality of mini-rolls arranged in longitudinal rows spaced apart across the width of the oven for conveying the glass sheet in the bending section;

". . . an actuator 16 for deforming the (lower) platen from a planar shape to a bent shape", re Fig. 1 (column 4, lines 47-49).

". . . upper platen further includes an actuator 42 . . . for raising the upper platen . . . and furthermore allow for returning the upper platen to a planar shape" (Column 5, line 61 to column 6, line 2).

"heating furnace not shown" (Column 6, lines 22-23).

"In Fig. 5, platen 14, 22 are in a spaced, planar configuration for receiving the heated glass sheet 12 which has been heated" (Column 6, lines 19-22).

". . . a glass heating furnace" (Column 6, lines 22-23).

As shown in Fig. 2 of the drawings, "the lower platen 14 includes . . . drive wheels 30 . . . to provide movement of the glass sheet during platen deformation that provides the bending." (Column 5, lines 39-

power means connected to the mini-rolls for rotating them; and

means connected to each longitudinal row of mini-rolls to change the vertical position of the mini-rolls to a glass bending position where the vertical position of each longitudinal row of mini-rolls across the width of the oven has the contour of a desired bend for bending the hot, softened glass sheet to the desired contour.

22. Apparatus for bending glass sheets, comprising:

an oven for receiving glass sheet and for heating the glass sheet to a hot, softened condition, the oven having a heating section; and

a bending section adjacent to the heating section;

means in the oven for heating a glass sheet;

43). Such wheels 30 are shown in longitudinal rows across the platen in Figures 2 and 5-8.

"reversible drive electric motors 36 drive drive wheels 30" (Column 5, lines 48-53).

Re Figures 1 and 5-8, "Actuator 16 is controllable to control the amount of bending or deformation across the platen 14." (Column 4, lines 54-56).

" ... glass heating furnace, not shown" (Column 6, lines 22-23).

"In Fig. 5, platen 14, 22 are in a planar spaced configuration for receiving the heated glass sheet 12 which has been heated" (Column 6, lines 19-22).

"... a glass heating furnace" (Column 6, lines 22-23).

the bending section having a plurality of mini-rolls arranged in longitudinal rows spaced apart across the width of the oven for conveying the glass sheet in the bending section;

power means connected to the mini-rolls for rotating them;

means connected to each longitudinal row of mini-rolls to change the vertical position of the mini-rolls to a glass bending position where the vertical position of each longitudinal row of mini-rolls across the width of the oven has the contour of a desired bend for bending the hot, softened glass sheet to the desired contour; and

means for quenching the bent glass sheet.

23. The apparatus of claim 22, wherein the quench means includes a quench section comprising:

As shown in Fig. 2 of the drawings, "the lower platen 14 includes ... drive wheels 30" (column 5, lines 39-40). Such wheels 30 are shown in longitudinal rows in Figures 2 and 5-8, "across the platen 14" (column 4, line 56).

"reversible drive electric motors 36 drive drive wheels 30" (Column 5, lines 48-53).

Re Figures 1 and 5-8, "Actuator 16 is controllable to control the amount of bending or deformation across the platen 14." (Column 4, lines 54-56).

"quenching gas (from source 44) is supplied to ... both sides of glass sheet 12 to temper the bent glass sheet" (Column 5, lines 10-13).

". . . a source 44 of quenching gas and a connector 46 for connecting the source of quenching gas to the quench tubes 32." (Column 6, lines 8-10).

upper quench tubes arranged in longitudinal rows;

lower quench tubes arranged in longitudinal rows; and

means connected to the upper and lower rows of quench tubes for changing the vertical position of each row of quench tubes to a quench position where the upper quench tubes have the same contour as the top surface of the bent glass sheet and the lower quench tubes have the same contour as the bottom surface of the bent glass sheet.

24. The apparatus of claim 22, wherein the quench means includes a quench section comprising:

upper quench tubes arranged in longitudinal rows;

Quench tubes 32 are shown arranged in longitudinal rows in Fig. 3.

Lower quench tubes 32 are shown arranged in longitudinal rows in the Fig. 2 "plan view of a lower bending platen", (column 4, line 7).

". . . upper platen further includes an actuator 42 . . . for raising the upper platen . . . and furthermore allow for returning the upper platen to a planar shape" (Column 5, line 61 to column 6, line 2); "an actuator 16 for deforming the (lower) platen from a planar shape to a bent shape", re Figures 5-8. See also last 4 lines of Abstract; column 2, lines 38-42; column 3, lines 24-27; and column 5, lines 35-38.

". . . a source 44 of quenching gas and a connector 46 for connecting the source of quenching gas to the quench tubes 32." (Column 6, lines 8-10).

Upper quench tubes 32 are shown arranged in longitudinal rows in Fig. 3.

lower quench tubes arranged in longitudinal rows; and

means connected to at least one of the upper and lower rows of quench tubes for changing the vertical position of each row of quench tubes to a quench position where the upper quench tubes have the same contour as the top surface of the bent glass sheet and the lower quench tubes have the same contour as the bottom surface of the bent glass sheet.

25. A method for bending glass sheets, comprising:

providing an oven having a heating section

and a bending section with mini-rollers;

Lower quench tubes 32 are shown arranged in longitudinal rows in the Fig. 2 "plan view of a lower bending platen", (column 4, line 7).

". . . upper platen further includes an actuator 42 . . . for raising the upper platen . . . and furthermore allow for returning the upper platen to a planar shape" (Column 5, line 61 to column 6, line 2); "an actuator 16 for deforming the (lower) platen from a planar shape to a bent shape", re Figures 5-8. See also last 4 lines of Abstract; column 2, lines 38-42; column 3, lines 24-27; and column 5, lines 35-38.

". . . glass heating furnace, not shown" (column 4, lines 22-23).

As shown in Fig. 2 of the drawings, "the lower platen 14 includes . . . drive wheels 30" (Column 5, lines 39-43).

heating the glass sheet in the heating section of the oven to a hot, softened, bendable condition;

bending the hot, softened glass sheet in the bending section by changing the vertical position of the mini-rollers supporting the glass sheet to a glass bending position where the vertical position of the mini-rollers across the width of the oven has a contour which conforms to the contour of a desired glass bend;

allowing the softened glass sheet to bend to the desired bent shape of the mini-rollers; and

quenching the bent glass sheet.

". . . heated in a glass heating furnace . . ." (Column 6, lines 22-23).

"After the heated glass sheet 12 has been indexed onto lower platen 14, by operation of drive wheels 30, . . . the lower platen 14 is raised and deformed by actuator 16 to a preset profile to bend the heated glass sheet 12" (Column 5, lines 24-28).

"The glass sheet 12 is then immediately quenched to provide the desired mechanical characteristics." (Column 6, lines 34-36).

The Examiner objects to the specification under the first paragraph of 35 U.S.C. § 112. In particular, he states that "the disclosure does not provide for only two platens with quench openings but requires that a plurality of moveable platens." [sic] Applicants disagree and submit that the disclosure provides a first upper deformable platen 22 and a second lower deformable platen 14 -- only two platens, each being comprised of a plurality of quench tubes 32. See Abstract, line 2, et seq; specification, column 2, line 52 et seq; and claims 1 through 20. Drawing figures 1 through 8 also show one upper and one lower deformable platen.

The reference to "platens" refers to the total area of the lower platen as shown in Figure 2 and the upper platen

as shown in Figure 3. In each, the platen is made up of longitudinal rows of tubes 32 which have openings 18 arranged throughout the platens 14,22 whereby to uniformly quench the glass sheet therebetween. Such structure is included in claims 1-24 as noted above and is supported by the specification in the same manner it was supported in the original patent. Such structure also supports the method steps of claim 25.

Therefore, Applicants submit that the two deformable platens, and quench openings that move therewith during deformation thereof, are clearly taught by the specification of the original patent.

Claim 19 has been amended by amending claim 18 to remove "portions."

Claim 20, as amended, is in all material respects claim 5 of U.S. Patent No. 5,009,693. The Examiner states that claim 20 as amended is still replete with new matter "since throughout the claim "tubes" is recited." Applicants direct the Examiner's attention to hereinabove parsed claim 20 for column and line support from Applicants' use of "tubes."

Claim 17 has been amended in response to the Examiner's statement that "there is no enablement to form means to receive a bent glass sheet". Amended claim 17 as parsed hereinabove shows column and line support for each element now recited in claim 17. Therefore, Applicants submit that amended claim 17 is now enabled.

The Examiner states that "the omission of bending lacks merit" Applicants respectfully disagree with the Examiner's statement and direct the Examiner to Applicants object of the invention which recites:

"Another object of the invention is to provide an apparatus that has movable quench openings that move with the surfaces of the flat glass sheet to provide equal thermal conditions during tempering and a more uniformly tempered glass sheet." (Column 2, lines 38-42).

Applicants believe that a skilled artisan reading the specification and the quotations hereinabove taken therefrom could only conclude that such object is reasonably supported with bending omitted. The Examiner's objection as to how a bent glass sheet is received is mooted by the claims as amended.

Addressing the Examiner's statement that "There is no enablement to eliminate the actuator", Applicants submit that the invention resides in the quenching or tempering invention as hereinabove described and that the claims need not be limited by such inclusion. Applicants' position is supported by the object of the invention which does not include an "actuator":

". . . to provide an apparatus that has movable quench openings that move with the surfaces of the flat glass sheet to provide equal thermal conditions during tempering and a more uniformly tempered glass sheet." (Column 2, lines 38-42).

The Substitute Declarations

Applicants and the undersigned have submitted new declarations as substitutes for those now in this reissue application. Applicants submit that these substitute declarations have addressed the objections of the Examiner and are now in compliance with 37 C.F.R. § 1.63 and 37 C.F.R. § 1.175(a).

Prior Art Rejections

The rejection in the first Office Action of claims 17 through 19 is repeated as being anticipated under 35 U.S.C. § 102(b) or as being obvious under 35 U.S.C. § 103 over Yoshizawa, Nushi, or McMaster '854. Applicants respectfully traverse this rejection and repeat their earlier filed response.

Applicants are puzzled by the Examiner's interpretation of Yoshizawa as including deformable platens. No such structure is taught or suggested therein. For instance, Yoshizawa mold members 1,2 are not deformable.

With respect to the Nushi et al reference and the Examiner's comments that insulating pads 11 constitute a deformable surface, Applicants submit that the Examiner is misinterpreting their invention. Pads 11, in the context of the glass bending apparatus disclosed in Nushi, lay immovably on mold 6 (see Fig. 5). Accordingly, pads 11 are not deformable. Applicants' platens are comprised of a plurality of longitudinally extending quench tubes that are relatively movable for quenching, or transporting or receiving a bent glass sheet. Not only does Nushi et al not teach a deformable platen, insulating pads 11 are not deformable in any way to more uniformly quench a bent glass sheet.

Finally, the Examiner argues that "The surface of McMaster is . . . deformable . . ." and thus McMaster '854 anticipates or makes obvious a deformable platen for shaping glass sheets. Applicants submit that no deformation is taught or suggested in McMaster and any deformation of the surface 22 is clearly unintended when forming the glass sheet to a single curved shape.

In addition, each of claim 17-19 patentably distinguish the cited references as follows:

Claim 17:

". . . opposing upper and lower movable rows of spaced apart quench tubes, each row of quench tubes having quench openings which are conformable to the glass sheet when the rows move; means for movably engaging the glass sheets connected to said movable rows of quench tubes; and means to supply quenching gas through the quench openings to uniformly temper a bent glass sheet therebetween."

Claim 18:

". . . a first deformable platen for receiving a heated glass sheet and including a plurality of first longitudinally extending quench tubes having quench openings that move with the tubes during the deformation of the first platen; a second deformable platen having a second plurality of longitudinally extending quench tubes having quench openings that move with the second plurality of tubes during deformation of the second platen; the quench openings of the first deformable platen and the quench openings of the second deformable platen opposing each other when a bent glass sheet is therebetween; and means to supply quenching gas through the quench openings to temper such bent glass sheet."

Claim 19:

"Glass bending and tempering apparatus as in claim 18 further comprising: an actuator connected to one of the plurality of longitudinally extending quench tubes for deforming the platen from a planar shape to a bent shape."

For the above reasons, the Examiner's rejections under 35 U.S.C. §§ 102 and 103 should be withdrawn. Applicants have addressed the double patenting rejection of the claims in their response to the first Office Action.

Conclusion

This Amendment is believed to be fully responsive to the rejections, objections, comments and suggestions of the Examiner, and to place this reissue application in condition for allowance. Moreover, claims 20-23 and 25 have been copied in all material respects from U.S. Patent No. 5,009,693 and are believed in condition for a determination of priority.

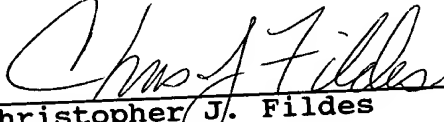
A check in the amount of \$ 129.00 is enclosed herewith for the addition of new claims 21-25.

The undersigned asks that the Examiner telephone the undersigned to answer any questions he may have regarding this reissue application or its Amendment.

Respectfully submitted,

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